

# Clinical Laboratory Update

September 2021

[www.milwaukee.gov/healthlab](http://www.milwaukee.gov/healthlab)

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## From the desk of the Public Health Laboratory Director

### ***MHDL validates CT/GC NAAT testing for adolescent population***

The MHD Laboratory has completed validation for Aptima Combo 2 (AC2) Nucleic Acid Amplification Testing (NAAT) for chlamydia and gonorrhea (CT/GC) on urine specimens collected from patients age 12-15 years. Effective **Monday, October 11**, MHDL will accept urine specimens collected from patients  $\geq 12$  years for CT/GC NAAT only. MHDL continues to work in partnership with other STI reference testing centers toward clinical validation of additional genital and extra genital NAAT testing for the adolescent age group.

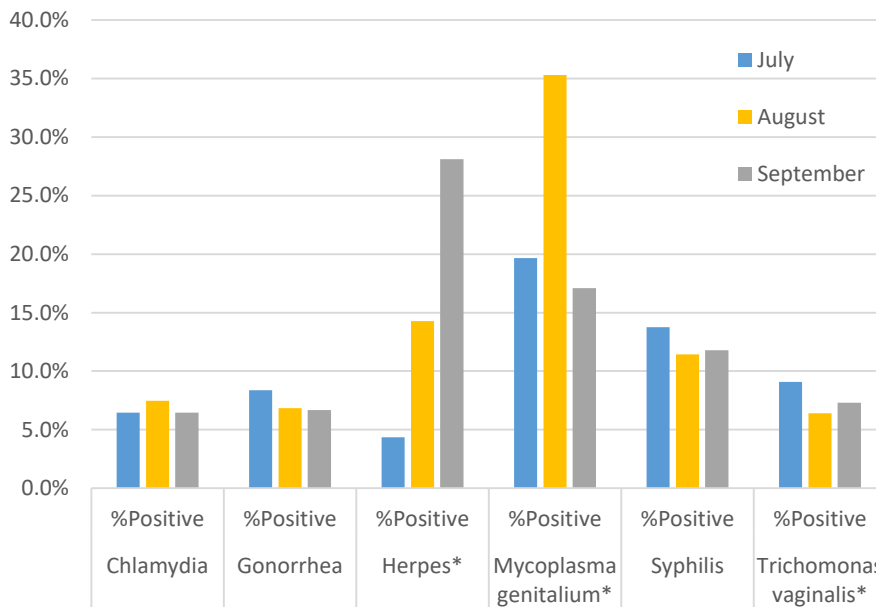
### ***MHDL staff co-authors CDC partnership publication***

The MHD Laboratory staff co-authored a recently published COVID-19 research article in collaboration with the Centers for Disease Control and Prevention (CDC) and other public health agencies. Entitled, [Performance of existing and novel surveillance case definitions for COVID-19 in household contacts of PCR-confirmed COVID-19](#), the article was published in the September 25 issue of BioMed Central (BMC) Public Health. The research outlined in the article concludes that existing COVID-19 case definitions appropriately screened in household contacts with COVID-19, particularly noting that novel symptom combinations incorporating taste or smell dysfunction as a primary component improved accuracy, while also indicating that definitions tailored for children versus adults should be further explored. The full open access article is available on the [BMC Public Health website](#).

### ***MHD authors featured in STD Journal***

MHD Laboratory, STI program and WI DHS staff have successfully contributed to the national SURRG (Strengthening U.S. Response to Resistant Gonorrhea) program for the last 5 years. With recently secured funding for the 6<sup>th</sup> consecutive year, we continue to enrich science, improve program deliverables and collaborate with partner community and STI clinics. Those efforts are highlighted in multiple peer-reviewed publications co-authored by MHD and WI DHS staff in the recently published [STD Journal SURRG Supplement](#).

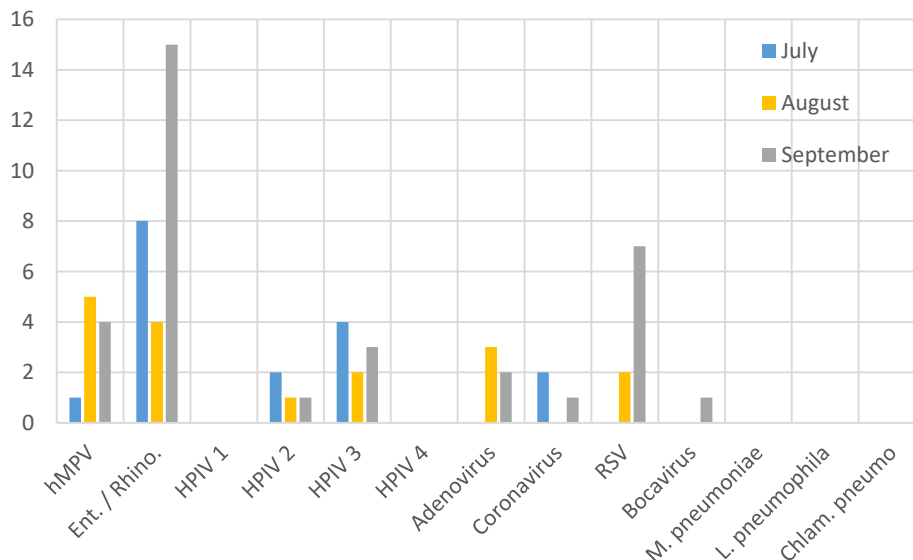
## Sexually Transmitted Infections



**Figure 1:** Percent positivity for specimens screened using molecular or serological assays for the given organism.

\*Not reportable as per WI DHS 145.04 (3) (a)

## Respiratory Infections



**Figure 2:** Respiratory pathogens detected using a Respiratory Pathogen Panel (RPP) and/or RT-PCR Influenza assay.

### Links to related information & data:

[MHDL COVID-19 Testing website](#)

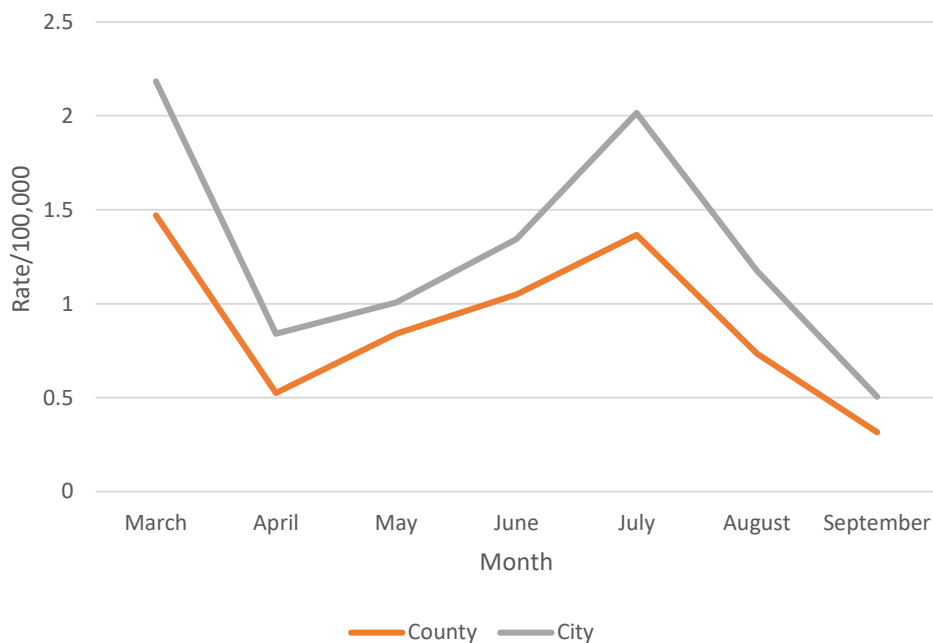
[MHD COVID-19 Situation](#)

[WSLH Laboratory Surveillance Report](#)

Connect with your health department:



## New HIV Infections

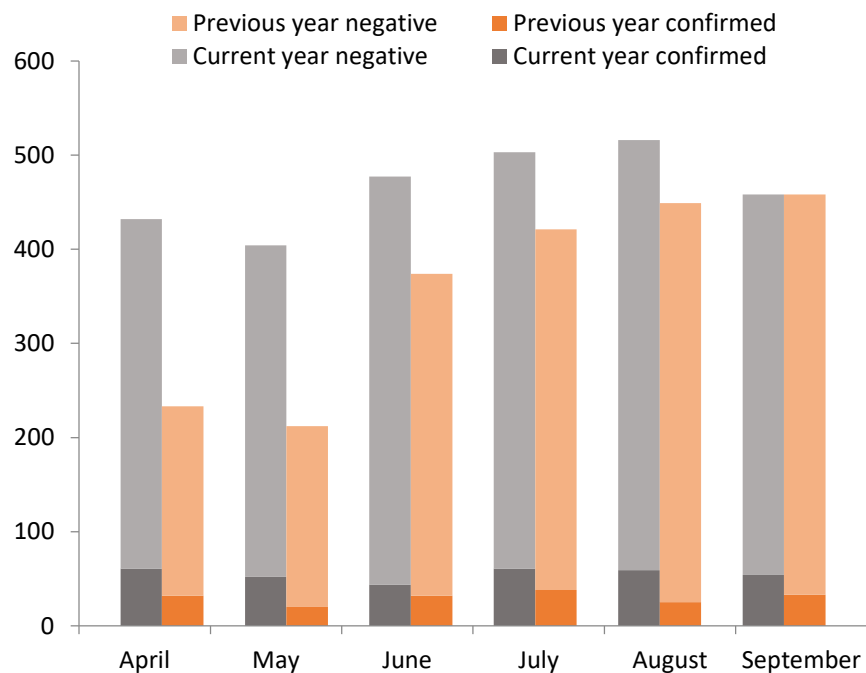


**Figure 3:** Monthly comparison of rate of new HIV infections in Milwaukee County and the City of Milwaukee, using data obtained from the Wisconsin Department of Health Services. Numbers are provisional and subject to change.

For statewide HIV data, visit:

<https://www.dhs.wisconsin.gov/hiv/data.htm>

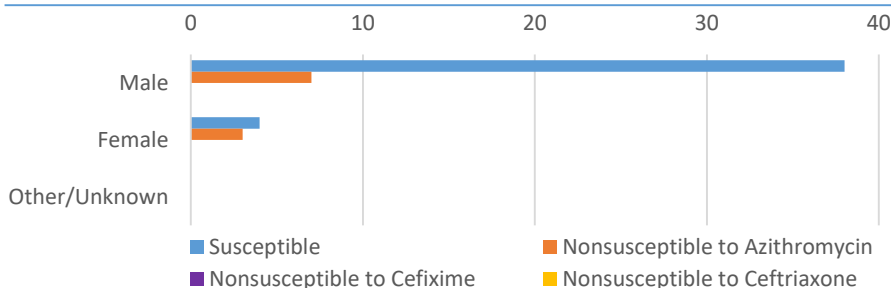
## Syphilis Surveillance



**Figure 4:** Monthly comparison of syphilis data with year over year comparisons.

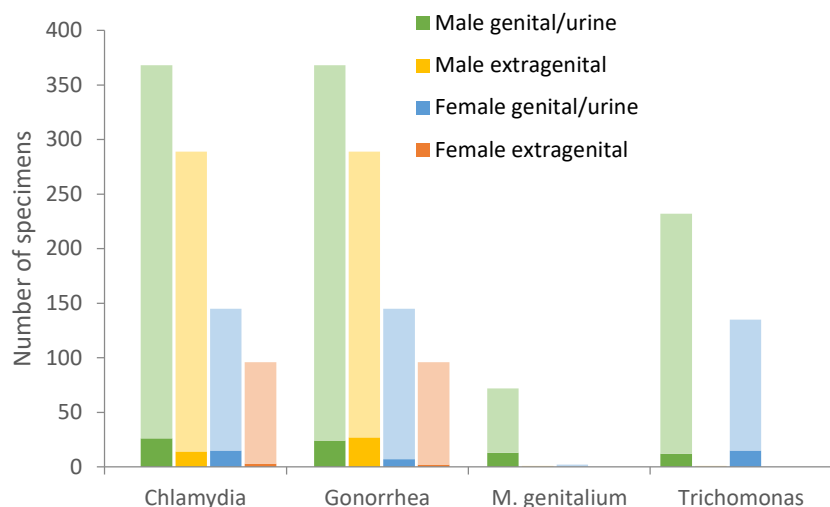
*Number of specimens screened at MHD, darker bars represent confirmed tests.*

## Gonorrhea Antimicrobial Susceptibility Testing



**Figure 5:** Antibiotic susceptibility profile of Gonorrhea isolates identified in males and females. In September 2021, 10 of 52 cultures tested were found to be nonsusceptible to Azithromycin according to CLSI guidelines. MHD tests for antibiotic resistance to Azithromycin, Ceftriaxone, Cefixime and Gentamicin.

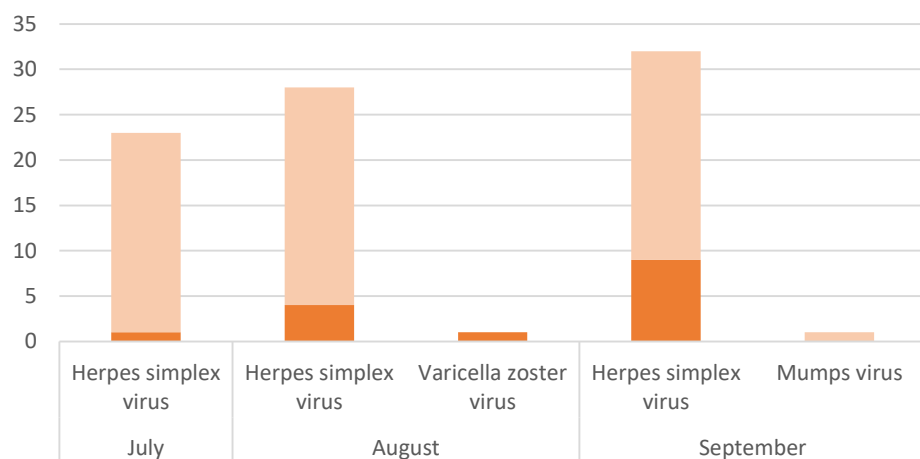
## Sexually Transmitted Infections by Source



**Figure 6:** Distribution of STIs detected using NAAT. In September 2021 6.1% of male and 7.5% of female specimens screened were positive for Chlamydia. 7.8% of male and 3.7% of female specimens were positive for Gonorrhea. 17.8% of male and 0 of the 2 female specimens were positive for *M. genitalium*. 5.2% of male specimens and 11.1% of female specimens were positive for *Trichomonas*.

*Note: Darker bars indicate positive specimens.*

## Viral Surveillance

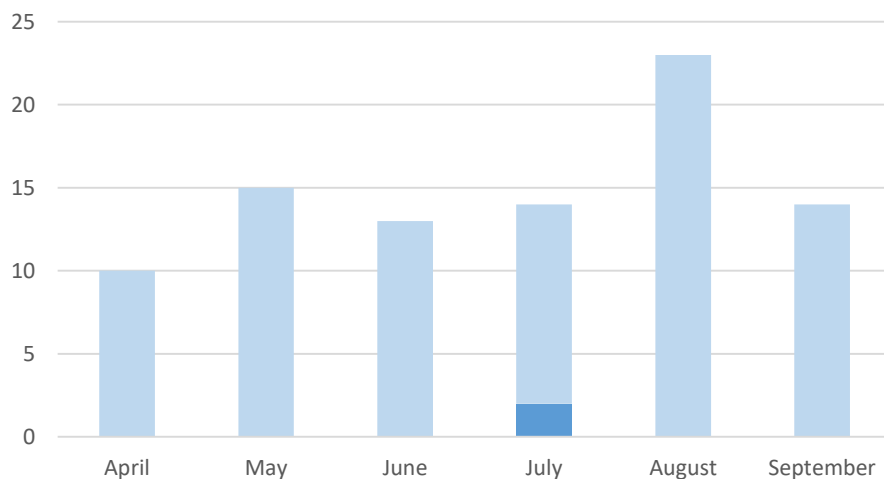


**Figure 7:** Specimens tested using molecular methods.

*Note: Height of bar indicates number of specimens tested.*

*Darker bars indicate DNA/RNA detected by virus culture, real-time PCR and/or nucleotide sequencing analysis.*

## Legionella Testing



**Figure 8:** Clinical specimens tested using culture and molecular methods.

\*MHDL is one of the **CDC ELITE** certified sites for environmental *Legionella* testing. See the Winter 2019 issue of the [APHL Bridges newsletter](#) for more information.

*Note: Darker bars indicate confirmed Legionella pneumophila by culture and/or real-time PCR.*